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CW 15: SLOPES of Parallel + Perpendicular Lines

**Geometry**

**Think about it . . .** A right triangle has a vertex at . Determine two other ordered pairs that will create a right triangle, you can use the numbers 1 through 0, but you can only use a number once. Prove that your points work, using your knowledge of slope.

1. The triangle ABC has vertices A(-3,1), B(1,3), and C(2,-4). Graph the figure and determine if the triangle is a right triangle.
2. The quadrilateral HUIR has vertices H(-5,-2), U(-4,3), I(-2,3), and R(0,-1). Graph the figure and determine if the quadrilateral is a square or a rectangle.
3. The triangle ULF has vertices U(-3,0), L(-2,4), and F(-1,1). Graph the figure and **write the equation** of each side of the triangle.
4. The rectangle ABCD has vertices at A(-3,0), B(3,2), C(4,-1), and D(-2,-3). Graph the figure and prove that ABCD is a rectangle using both distance and slope.
5. The quadrilateral QBCD has vertices D(5,1), E(2,4), F(-4,4), and G(-1.1). Graph the figure and determine if the quadrilateral is a square or a rectangle.

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